Module Overview B.Sc. Mathematics - Field of Study Mathematics (10 Semesters)

Degree Programm Guidelines as per 01.10.2018, Version 01.10.2018

The degree programme consists of 180 Credit Points (CP) in total:

Mandatory Area in Mathematics: Interdisciplinary Electives/ 83 CP

Mathematical Seminar/Project: 5 CP Studium Generale: 17-20 CP

Elective Subjects Area: 60-63 CP Mandatory Interdisciplinary Area: 9CP

Additional Courses in

Interdisciplinary Electives: • Studium Generale: Mathematics: 32-37 CP 3-6 CP

Minor Courses: **Bachelor-Thesis:** 26-31 CP 12 CP



offered in English or German

This leads to the following *possible* semester course schedule:

Language of Tuition: GERMAN

Certificates required

Vollzeit		Teilzeit		
1. Semester	2. Semester	3. Semester	4. Semester	5. Semester
Linear Algebra I ^{bili} (9 CP)	Linear Algebra II ^{bili} (9 CP)	Ordinary Differential Equations (5 CP)	Integration Theory (9 CP)	Introduction to Numerical Analysis (9 CP)
Analysis I ^{bili} (9 CP)	Analysis II ^{bili} (9 CP)	Complex Analysis (5 CP)	Introduction to Algebra (5 CP)	
Introduction to Programming I (3 CP)	Introduction to Programming II (3 CP)	Introductory Seminar ^{bili} (3 CP)		
	Interdisciplinary Electives**			
Studium Generale***				
Minor Courses				
30 CP	30 CP	15 CP	14 CP	16 CP
Teilzeit				
6. Semester	7. Semester	8. Semester	9. Semester	10. Semester
Introduction to Stochastics (9 CP)		Seminar ^{bili} or Project ^{bili} in Mathematics (5 CP) Bachelor-Thesis (12 CP)		
Algorithmic Discrete Mathematics (5 CP)	Additional Courses in Mathematics* (32 - 37 CP)			
Interdisciplinary Electives** (5 - 8 CP)				
Studium Generale*** (3 - 6 CP)				
Minor Courses Chemistry, Computer Science, Mechanics, Physics, Business Engineering (select one) other options upon request(26 - 31 CP)				
14 CP	16 CP	15 CP	15 CP	15 CP

- At least three core modules (algebra, analysis, geometry, logic, numerics, optimization and stochastics) must be taken (each 9 CP) as well as further courses in the range of 0 - 10 CP. Before registering for a course in this field for the first time, an exemplary study plan must be submitted to the examination board.
- A course of Mathematical General Knowledge must be taken.
- Complete catalogue of all courses at the TU Darmstadt, with the exception of courses in Mathematics and the minor subject.